004829904 WPI Acc No: 1986-333245/198 with high bulk density - by kn comminuting detergent mixt. contg. potassium alkylaryl sulphonate, and covering with fine, water insol powder Patent Assignee: LION CORP (LIOY Inventor: HARA N; NAGOH K; NAKAMURA M: TAI Y Number of Countries: 005 Number of Patents: 007 Patent Family: Week Kind Date Applicat No Kind Date Patent No. 19860527 198651 В 19861211 DE 3617756 Α DE 3617756 Α JP 85116033 19850529 198702 JP 61272300 Α 19861202 19870106 JP 85141092 19850627 198706 JP 62000598 A٠ 19881216 199048 US 4970017 Α 19901113 US 88285377 JP 94031430 B2 19940427 JP 85116033 Α 19850529 199415 19940427 19850627 199415 JP 94031431 **B2** JP 85141092 Α 19860527 199507 DE 3617756 19950119 DE 3617756 C2 Priority Applications (No Type Date): JP 85141092 A 19850627; JP 85116033 A 19850529; JP 8587448 A 19850425

Patent Details:

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DE 3617756 Α 36

Based on patent JP 61272300 **B2** 5 C11D-011/00 JP 94031430 Based on patent JP 62000598 4 C11D-011/00 JP 94031431 82

DE 3617756 C2 16 C11D-017/06

Abstract (Basic): DE 3617756 A

A granular detergent compsn. is prepd. by (a) kneading detergent components, contg. at least 10 wt. % of K alkylaryl sulphonate, to form a kneaded, solid detergent mixt., (b) comminuting this mixt. and (c) covering the comminuted compsn. with water-insol., finely divided powder particles with prim. particle size not above 10 microns.

ADVANTAGE - The bulk density of the compsn. is high (e.g. at least 0.6 g/cc), dispersibility and solubility in cold water are better, powder properties are good, prodn. of dust is reduced, less energy is needed in drying, or no such energy is needed, and there is no need for additives which have no washing or cleaning effect. (36pp Dwg. No. 0/4) Abstract (Equivalent): DE 3617756 C

Prodn. of a granular detergent compsn. with a high packing density, comprises kneading the detergent components, which include at least 10 wt. % potassium alkylaryl sulphonate (1), to form a kneaded, solid mixt.; reducing the mixt. to small particles; and coating the particles with water-insol. fine particles (II) of average dia. 10 microns or

Pref., (1) is 8-18C alkyl-benzene sulphonate; and (11) are particles of calcium stearate, magnesium stearate, aluminium silicate, CaCO3, MgCO3, magnesium silicate, SiO2 or TiO2. The detergent particles have dia. 0.3-2 mm.

ADVANTAGE - The detergent has a density of 0.6 g/cm3 or more, improved dispersibility and solubility in cold water, and less dust formation during produ. Energy is not normally required for drying the particles.

Dwg. 0/4

Abstract (Equivalent): US 4970017 A

Granular detergent compsn. is produced by (a) kneading detergent ingredients contg 100% or more of potassium alkylaryl sulphonate to form a solid mixt.; (b) disintegrating this; then (c) coating with 0.5-5 wt.% of water-insoluble finely-divided powder particles of dia. 10 microns or less.

Pref. (a) includes (8-18C) alkyl-aryl sulphonate. Water-insoluble particles are derived from calcium or magnesium stearate or -carbonate, aluminium- or magnesium silicate, SiO2 or TiO2. ADVANTAGE - Has high bulk density. (9pp)

Derwent Class: D25; E12

International Patent Class (Main): C11D-011/00; C11D-017/06

International Patent Class (Additional): C11D-001/12; C11D-001/22; C11D-003/12; C11D-003/20